

Notice of Allowability

Application No.

10/633,888

Examiner

Alain L. Bashore

Applicant(s)

KOOL ET AL.

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2-23-07.
2. ☒ The allowed claim(s) is/are 28,29,31,33-39 and 45-47.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


ALAIN L. BASHORE
PRIMARY EXAMINER

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Response to Arguments

1. Applicant's arguments, see pages 6-8, filed 2-23-07, with respect to the Baldi reference have been fully considered and are persuasive.

Allowable Subject Matter

2. Claims 28-29, 31, 33-39, 45-47 are allowed.

Reasons for allowance

3. The following is an examiner's statement of reasons for allowance:

The present invention includes independent claims 28 and 38. Claim 28 recites a method for aluminiding the surface region of a metal substrate. Claim 38 recites a method for aluminiding the surface region of a nickel-based superalloy substrate.

McMordie et al is considered the closest prior art. McMordie et al teaches providing a coating on a nickel-based alloy substrate, to enhance its oxidation and corrosion resistance. The substrate is first enriched with platinum by depositing a layer of the metal on the surface of the substrate, and then heating the surface to diffuse the platinum into the substrate. Aluminum and silicon are simultaneously diffused from a molten state onto the substrate.

McMordie et al does not disclose the claimed combination including:

In claim 28:

applying at least one layer of a slurry coating to the surface of the substrate; wherein the slurry coating is substantially free of hexavalent chromium, and comprises (a) colloidal silica; (b) particles of an aluminum-based powder, having an average particle size in the range of about 0.5 micron to about 200 microns; and (c) an organic stabilizer which contains at least two hydroxyl groups; and then

heat treating the slurry coating.

In claim 38:

spraying at least one layer of a slurry coating on the surface of the substrate; wherein the slurry coating is substantially free of hexavalent chromium, and comprises colloidal silica; particles of an aluminum-based powder; and an organic stabilizer, wherein the aluminum-based powder has an average particle size in the range of about 0.5 micron to about 200 microns; and the organic stabilizer is selected from the group consisting of alkane diols, glycerol, pentaerythritol, fats, and carbohydrates; and then
heat treating the slurry coating.

For these reasons claims 28 and 38 are deemed to be allowable over the prior art of record, and claims 29-31, 33-37, 39, 45-47 are allowable by dependency.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alain L. Bashore whose telephone number is 571-272-6739. The examiner can normally be reached on about 7:30 am to 5:00 pm (Mon. thru Thurs.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Alain L. Bashore
Primary Examiner
Art Unit 1762